

Background

Death and disability are serious consequences of chronic diseases such as heart disease, cancer, and diabetes. Nationwide, 70% of all deaths every year are due to chronic diseases. In addition, chronic diseases are costly. Fortunately, much of the chronic disease burden is preventable.¹ The World Health Organization estimates that eliminating major risk factors for chronic disease would prevent at least 80% of all heart disease, stroke, and type 2 diabetes and more than 40% of cancer cases.²

Physical inactivity, tobacco use, poor nutrition, and alcohol use are four modifiable health risk behaviors that contribute significantly to the burden of chronic diseases.¹ Far too many North Carolinians practice these unhealthy behaviors. Of adults in North Carolina in 2009, 20.3% were smokers, and only one in five (20.6%) consumed five or more servings of fruits and vegetables per day.³⁻⁵ In addition, less than half of adults (46.4%) in North Carolina reported they get the recommended amount of physical activity.⁶ In a 2007-2008 survey, approximately 7% of North Carolinians reported alcohol dependence or abuse, and a much higher percentage (21.4%) reported binge alcohol use in the past month.^{a,7}

Healthy North Carolina 2020: Chronic Disease Objectives

The HNC 2020 experts identified the following three measures for objectives in the chronic disease focus area: the cardiovascular disease mortality rate, the percentage of adults with diabetes, and the colorectal cancer mortality rate. The data grid on page 100 shows baseline and current North Carolina data, national rankings (when available), data from select states (when available), potential targets, selected targets, data sources, and relevant notes.

OBJECTIVE 1: REDUCE THE CARDIOVASCULAR DISEASE MORTALITY RATE TO 161.5 (PER 100,000 POPULATION) (KEY PERFORMANCE INDICATOR)

Rationale for selection: Cardiovascular disease (CVD), often referred to as heart disease, can lead to outcomes such as heart attacks, chest pain, and stroke, which result from narrowed or blocked blood vessels.⁸ Heart disease and stroke were the second and third leading causes of death in North Carolina in 2009.⁹ In 2008, the cardiovascular disease mortality rate was 256.6 per 100,000 population.^b

North Carolina is part of the Stroke Belt—a region in the country with historically higher stroke mortality rates compared to the rest of the nation. The eastern counties of the state are part of the Buckle of the Stroke Belt, an area where stroke mortality rates have been the highest in the nation for the past 30 years or more. Mortality rates due to stroke are markedly higher among individuals aged 35-54 years and aged 55-74 years in this area when compared to their counterparts nationwide. North Carolina's stroke mortality rate has declined over recent years; however, it remains higher than the US rate.¹⁰

The leading behavioral risk factors for heart disease and stroke are poor nutrition, physical inactivity, tobacco use, obesity, and excessive alcohol use. The effects of these risk factors can lead to other risk factors such as high blood pressure, high triglyceride levels, and elevated LDL (bad) cholesterol levels. Individuals with diabetes, a condition also associated with and impacted by these behavioral risk factors, are at increased risk for developing cardiovascular disease.¹¹

a Binge alcohol use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days. Alcohol dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

b State Center for Health Statistics, North Carolina Department of Health and Human Services. Written (email) communication. July 9, 2010.